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CATALOGUE OF BACKFILL LITERATURE

T.R.C. Aston and A. Annor

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CATALOGUE OF BACKFILL LITERATURE

by

T.R.C.[1] Aston and A. Annor[2]

ABSTRACT

Examination of the published backfill literature reveals that although a considerable amount of information exists, it is disseminated across a wide range of conference and journal publications. A catalogue has therefore been prepared which simplifies the referencing and identification of backfill research and technology related literature. The material listed, primarily covers the period from the mid-1970's to date, but does not claim to contain every single item ever published. However, it does contain over 300 articles, all readily available in the English language, which encompass backfill technology and research in both hardrock and potash mining applications. A small number of revelant references related to the use of backfilling in coal mining operations are also included.

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CATALOGUE DES PUBLICATIONS SUR LES REMBLAIS

par

T.R.C. Aston[1] et A. Annor[2]

RÉSUMÉ

Un examen da la documentation publiée sur les remblais révèle que bien qu'il existe un volume considéable d'information, celle-ci est dispersée dans une vaste gamme de journaux et de publications de conférences. Les auteurs ont donc préparé un catalogue en vue de simplifier l'établissement d'indices et l'identification des documents qui portent sur la recherche et la technologie en matiére de remblai. La plupart des documents qui y figurent s'échelonnent de 1975 à 1991. Toutefois le catalogue ne se veut pas une ventilation compléte de toutes les publications dans le domaine. Or, il présente plus de 300 articles, tous étant facilement disponibles en anglais, sur la technologie et la recherche en matière de remblais utilisés à des fins d'exploitation des mines en roche dure et des mines de potasse. Y figurent également quelques articles pertinents sur l'utilisation de remblais dans l'extraction du charbon.

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INTRODUCTION

Since the 1950's, the incremental development and subsequent application of backfill technology has been viewed as a viable means of improving mine productivity and safety, while at the same time reducing costs.

Examination of published backfill literature reveals that although a considerable amount exists, it is disseminated across a wide range of conference and journal publications. A catalogue has therefore been prepared which simplifies the referencing and identification of backfill research and technology related literature. The material listed, primarily covers the period from the mid-1970's to date, but does not claim to contain every single item ever published. However, it does contain over 300 articles, all readily available in English, which encompass backfill technology and research in both hardrock and potash mining applications.

In order to simplify use of the catalogue and the referencing of material related to a particular backfill topic, all the references were examined and placed under one of the following subject headings:

Text Books and Conference Proceedings

Fill Design and Evaluation - General
Fill Properties and Additives
Economic Considerations
Fill Reinforcement
Rockfill
Pneumatic Fill
Hydraulic Fill
Paste Fill

Preparation, Transportation and Handling

Numerical Modelling Studies

Physical Modelling Studies

Rockbursts

Rock Mechanics and Instrumentation Techniques

Bulkheads and Water

Potash and Salt

Ventilation

Uranium

Tungsten

Coal

Ice and Frozen Backfill

Case Studies - Australia
Canada
South Africa
Sweden
U.S.A.
Austria
China
Cyprus
Finland
Germany
India
Italy
Turkey
Yugoslavia
Zaire
Zambia

Within each category, the literature citations are listed chronologically and then alphabetically within each year.

BOOKS

Thomas, E.G., Nantel, J.H. and Notley, K.R.
"Fill Technology in Underground Metalliferous Mines"; Published International Academic Services Ltd, Kingston, Canada, 1979, 293 pages.

CHAPTERS IN BOOKS

Brady, B.H.G. and Brown, E.T.
"Chapter 6 - Artifically Supported Mining Methods"; In: Rock Mechanics for Underground Mining; Published George Allen and Unwin, London, U.K., 1985, pp.351-368.

CONFERENCE PROCEEDINGS

1989

"Innovations in Mining Backfill Technology"; Proceedings 4th International Symposium 'Mining With Backfill', Montreal, Canada, October 2 - 5, 1989; Edited F.P. Hassani, M.J. Scoble and T.R. Yu; Published A.A. Balkema, 1989, 452 pages.

1988

"Backfill in South African Mines"; Published South African Institute of Mining and Metallurgy, Special Series SP2, Marshalltown, S.A., 1988, 635 pages.

1983

"Mining With Backfill"; Proceedings International Symposium 'Mining With Backfill', Luleå, Sweden, June 7 -9, 1983; Edited S. Granholm; Published A.A. Balkema, 1983, 464 pages.

1980

"Application of Rock Mechanics to Cut and Fill Mining"; Proceedings of the Conference 'Application of Rock Mechanics to Cut and Fill Mining', Luleå, Sweden, June 1 - 3, 1980; Edited O. Stephansson and M.J. Jones; Published Institute of Mining and Metallurgy, 1981, 376 pages.

1978

"Mining With Backfill"; Proceedings 12th Canadian Rock Mechanics Symposium, Sudbury, Canada, May 23 - 25, 1978; Published Canadian Institute of Mining and Metallurgy, Special Volume No. 19, 150 pages.

1973

"Mine Filling"; Proceedings Jubilee Symposium 'Mine Filling', Mount Isa, Australia, August 19 - 22, 1973; Published Australian Institute of Mining and Metallurgy, 282 pages.

1958

"----------"; Proceedings Symposium on Hydraulic Fill, Butte, Montana, U.S.A., May 9 - 10, 1958; Published Montana School of Mines.

FILL DESIGN AND EVALUATION

General

1991

Chen, L.J. and Jiao, D.
"A Design Procedure for Cemented Fill for Open Stoping Operations"; Jnl. Mining Science and Technology, Vol. 12, 1991, pp.333-343.

1990

CANMET.
"Vertical Block Mining (VBM) Design Guidelines: Chapter 1 - Cut and Fill Mining"; CANMET Contract Report; Prepared by Steffen, Robertson and Kirsten (B.C) and INCO Ltd, Thompson Division, March 1990, DSS File No. 14SQ.23440-4-9147.

1989

CANMET.
"In-situ Monitoring and Computer Modelling of a Cemented Sill Mat and Confines during a Tertiary Stage Pillar Recovery"; CANMET Contract Report (2 Volumes): Prepared by Falconbrige Ltd, June 1989, DSS File No. 06SQ.23440-5-9205.

Swan, G. and Board, M.
"Fill-Induced Post-Peak Pillar Stability"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.81-88.

Yamaguchi, U. and Yamatomi, J.
"An Experimental Study to Investigate the Effect of Backfill for Ground Stability"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.71-80.

1988

de Jongh, C.L. and Morris, A.N.
"Considerations in the Design and Operation of Backfill Systems for Narrow Tabular Orebodies"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.355-368.

Kirsten, H.A.D. and Stacey, T.R.
"Backfill Support Mechanisms in Stopes with Low Convergence"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.137-151.

Piper, P.S. and Ryder, J.A.
"An Assesment of Backfill for Regional Support in Deep Mines"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.111-136.

Stewart, J.M.
"Priorities in the Development of Backfill Technology and Systems for South African Gold Mines";'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.11-13.

1985

Swan, G.
"A New Approach to Cemented Backfill Design"; CIM Bulletin, Vol. 78, No. 884, December 1985, pp.53-58.

1983

Blight, G.E. and Bentel, G.M.
"The Behaviour of Mine Tailings during Hydraulic Deposition"; Jnl. South African Inst. Min. Metall.; Vol. 83, No. 4, April 1983, pp.73-86.

Chen, J - Y, Chen, D - W and Boshkov, S.H.
"Assessment of Support Performance of Consolidated Backfills in Different Mining and Geotechnical Conditions"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.365-386.

Dixit, J.P. and Raju, N.M.
"Evaluation of the Stability of Backfill Faces"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.341-348.

Rao, Y.V.A. and Vutukuri, V.S.
"Some Aspects of Recovery of Pillars Adjacent to Uncemented Stopes"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.397-404.

Wendian, H. and Renzhong, M.
"On Several Subjects in Flat-Back Cut and Fill Stoping"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.355-364.

1981

Mitchell, R.J. and Smith, J.D.
"The Compression - Percolation Test for Mine Tailings Backfill"; CIM Bulletin, September 1981, pp.85-89.

1980

Barrett, J.R. and Chester, G.
"Post-Pillar Cut and Fill Mining: Comparison of Theory and Practice"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.272-283.

Corson, D.R., Dorman, K.R. and Sprute, R.H.
"Improving the Support Characteristics of Hydraulic Fill"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.93-99.

Thomas, E.G.
"Selection and Specification Criteria for Fills for Cut and Fill Mining"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.128-132.

1979

Mitchell, R.J. and Smith, J.D.
"Mine Backfill Design and Testing"; CIM Bulletin, Vol. 72, No. 801, January 1979, pp.82-89.

1975

Richards, B.G.
"The Determination of Experimentally Based Load-Deformation Properties of a Mine Fill"; Proc. 2nd Australia - New Zealand Conference on Geomechanics, Brisbane, Australia; July 21 - 25, 1975, pp.56-62.

1973

Barrett, J.R.
"Structural Aspects of Cemented Fill Behaviour"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.97-104.

Aitchison, G.D., Kurzeme, M. and Willoughby, D.R.
"Geomechanics Considerations in Optimising the Use of Mine Fill - Part A: A Rational Approach to the Design of Fill"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.25-33.

Aitchison, G.D., Kurzeme, M. and Willoughby, D.R.
"Geomechanics Considerations in Optimising the Use of Mine Fill - Part B: The Investigation of the Response of Fill as a Structural Component"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.35-48.

1968

Nicholson, D.E. and Busch, R.A.
"Earth Pressure at Rest and One Dimensional Compression in Mine Hydraulic Backfills"; USBM RI 7198, Spokane Research Centre, Spokane, Wash., U.S.A., 1968, 40 pages.

Fill Properties and Additives

1989

CANMET.
"In-situ Properties of Backfill Alternatives in Ontario Mines"; CANMET Contract Report; Prepared by Falconbridge Ltd, September 1989, DSS File No. 09SQ.23440-6-9011.

Chan, H.T., Johnston, H.M., Konecny, K. and Dayal, R.
"Use of a Flue-Gas Desulphurisation By-Product for Stabilizing Hydraulic Mine Backfill"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.63-70.

Hopkins, P.H. and Beaudry, M.S.
"An Evaluation of Binder Alternatives for Hydraulic Mill Tailings"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.447-452.

Lamos, A.W. and Clarke, I.H.
"The Influence of Material Composition and Sample Geometry on the Strength of Cemented Backfill"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.89-94.

Loubser, D.S.
"Flocculant Additives and their Role in Backfilling"; S.A. Mining, Coal and Base Minerals, November 1989, pp.15-17.

Vickery, J.D. and Boldt, C.M.K.
"Total Tailings Backfill Properties and Pumping"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.369-378.

Viles, R.F., Boily, M.S. and Davis, R.T.H.
"New Materials Technologies Applied in Mining with Backfill"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.95-101.

1988

Barrett, A.J., Wrench, B.P. and Blair Hook, D.
"An Overview of Materials Testing Relevant to Backfilling at Vaal Reefs Gold Mine"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.61-75.

Briggs, D.J.
"The Load-Bearing Properties of Fill Materials (Uncemented Fills); 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.35-60.

Clarke, I.H.
"The Properties of Hydraulically Placed Backfill"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.15-33.

Clarke, I.H.
"Evaluation of Cemented Tailings Backfill"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.77-89.

Loubser, D.S.
"Flocculant Additives and their Role in Backfilling"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.299-306.

1986

Arioğlu, E., Yüksel, A. and Ağrali, Z.
"Strength Characteristics of Lime-Stabilised Mine Tailings"; Jnl. Mining Science and Technology, Vol. 3, 1986, pp.161-166.

1984

Manca, P.P., Massacci, G., Massidda, L. and Rossi, G.
"Stabilisation of Mill Tailings for Mining Backfill with Portland Cement and Fly Ash"; Trans. Inst. Min. Metall., Section A, Vol 93, January 1984, pp.A48-A54.

1983

Keren, L. and Kainian, S.
"Influence of Tailings Particles on Physical and Mechanical Properties of Fill"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.21-30.

Thomas, E.G.
"Characteristics of Cemented Deslimed Mill Tailing Fill Prepared from Finely Ground Tailing"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.59-66.

1982

Mitchell, R.J. and Wong, B.C.
"Behavior of Cemented Tailings Sands"; Canadian Geotechnical Journal, Vol. 19, 1982, pp.289-295.

1978

Thomas, E.G. and Cowling, R.
"Pozzolanic Behaviour of Ground Isa Mine Slag in Cemented Hydraulic Mine Fill at High Slag/Cement Ratios"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill'; CIM Special Vol No. 19; Sudbury, Canada, May 23 - 25, 1978, pp.129-132.

1973

Aylmer, F.L.
"Cement Properties Related to the Behaviour of Cemented Fill"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.59-63.

Braes, B.E.
"The Application of Polymeric Flocculants in Underground Backfill at the Zinc Corporation Limited and New Broken Hill Consolidated Limited"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.123-128.

Flann, R.C.
"A Laboratory Facility for Testing Cemented Fills"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.105-114.

Lukaszewski, G.M.
"Sulphides in Underground Mine Filling Operations"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.87-96.

Swain, H.D.
"An Investigation into the Use of Pyrrhotite as a Cementing Agent for Backfill"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.77-85.

Thomas, E.G.
"A Review of Cementing Agents for Hydraulic Fill"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.65-75.

Thomas, E.G.
"Cemented Hydraulic Fill Mix Design as it applies to Mine Scheduling"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.139-145.

1970

Corson, D.R.
"Stabilization of Hydraulic Backfill with Portland Cement"; USBM RI 7327, Spokane Research Centre, Spokane, Wash., U.S.A., 1970, 33 pages.

No Date

Boldt, C.M.K., McWilliams, P.C. and Atkins, L.A.
"Backfill Properties of Total Tailings"; USBM RI 9243, Spokane Research Centre, Spokane, Wash., U.S.A., 21 pages.

Economic Considerations

1986

Scoble, M.J. and Piciacchia, L.
"Hydraulic Backfill Design to Optimise Support and Cost Effectiveness"; Jnl. Mining Science and Technology, Vol. 4, 1986, pp.75-85.

1980

Almgren, G.
"Rock Mechanics and the Economics of Cut and Fill Mining"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.28-35.

Stout, K. and Friel, L.
"Testing and Placement of High - Modulus Fills in Steeply Dipping Underground Veins"; Proc. 21st U.S. Rock Mechanics Symposium, Rolla, Missouri, U.S.A., May 28 - 30, 1980, pp.797-805.

Fill Reinforcement

1989

Mitchell, R.J.
"Stability of Classified Tailings Backfills Containing Reinforcements"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.237-246.

1988

Dison, L. and Blight, G.E.
"Reinforced Cemented Tailings Fill"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.91-108.

1987

Mitchell, R.J. and Stone, D.M.
"Stability of Reinforced Cemented Backfill"; Canadian Geotechnical Journal, Vol. 24, 1987, pp.189-197.

1986

Lun, P.T.W.
"Soil Reinforcing Technique in Mine Backfilling"; Int. Jnl. Mining and Geological Engineering, Vol.4, 1986, pp.47-66.

1983

Hahn, J.A., Blight, G.E. and Dison, L.
"Support of Reinforced Granular Fill"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.349-354.

1980

Fuller, P.G.
"Pre-Reinforcement of Cut and Fill Stopes"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.55-63.

Rockfill

1990

Wittchen, V.C., Croxall, J.E. and Yu, T.R.
"Roadheader Excavation in Consolidated Rockfill at Kidd Creek Mines"; CIM Bulletin, Vol. 83, No. 937, May 1990, pp.41-45.

1973

Russell, R.E., Barrett, J.E. and Blair, J.R.
"Design and Evaluation of Dry Fill"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.129-137.

Pueumatic Fill

1976

Soderberg, R.L. and Corson, D.R.
"Support Capabilities of Pneumatically Stowed Materials"; USBM RI 8202, Spokane Research Centre, Spokane, Wash., U.S.A., 1976, 48 pages.

1972

Reynolds, J.W.
"Pneumatic Backfilling with Crushed Rock at the Sullivan Mine"; CIM Bulletin, Vol. 65, No. 723, July 1972, pp.31-36.

Hydraulic Fill

1978

Sprute, R.H. and Kelsh, D.J.
"Electrokinetic Dewatering of Hydraulic Backfill"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill'; CIM Special Vol No. 19; Sudbury, Canada, May 23 - 25, 1978, pp.124-128.

1976

McNay, L.M. and Hill, J.R.M.
"Strength of Hydraulic Sandfill Modified by Flocculants"; USBM RI 8126, Spokane Research Centre, Spokane, Wash., U.S.A., 1976, 14 pages.

Singh, K.H.
"Cemented Hydraulic Fill for Ground Support"; CIM Bulletin, Vol. 69, No. 765, January 1976, pp.69-74.

Spute, R.H. and Kelsh, D.J.
"Electrokinetic Consolidation of Slimes in an Underground Mine"; USBM RI 8190, Spokane Research Centre, Spokane, Wash., U.S.A., 1976, 31 pages.

1975

McNay, L.M. and Corson, D.R.
"Hydraulic Sandfill in Deep Metal Mines"; USBM IC 8663, Spokane Research Centre, Spokane, Wash., U.S.A., 1975, 63 pages.

1974

Thomas, E.G,
"Minimization of Contamination of Mined Ore by Cemented Hydraulic Fill"; Proc. Australian Inst. Min. Metall, No. 251, September 1974, pp.13-20.

1964

Nicholson, D.E. and Wayment, W.R.
"Properties of Hydraulic Backfills and Preliminary Vibratory Compaction Tests"; USBM RI 6477, Spokane Research Centre, Spokane, Wash., U.S.A., 1964, 31 pages.

Paste Fill

1990

Perry, R.J. and Churcher, D.L.
"The Application of High Density Paste Fill at Dome Mine"; CIM Bulletin, Vol. 83, No. 937, May 1990, pp.53-58.

1989

Aref, K., Hassani, F.P., and Churcher, D.A.
"A Study on Liquifaction Potential of Paste Backfill"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.405-414.

1988

Verkerk, C.G. and Marcus, R.D.
"The Pumping Characteristics and Rheology of Paste Fills"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.221-233.

1987

Aref, K. and Hassani, F.P.
"Geotechnical Characteristics of Paste Backfill"; Proc. 28th U.S. Rock Mechanics Symposium, Tucson, Arizona, U.S.A., June 29 - July 1, 1987, pp.1205-1212.

PREPARATION, TRANSPORTATION AND HANDLING

1991

Chen, L.J.
"Fluidisation Technique for Mine Backfill with Slurry of High Density"; Jnl. Mining Science and Technology, Vol. 12, 1991, pp.325-332.

1989

Fuss, H. and Jost, M.
"Double-Wall Hardened Abrasion Resistant Steel Pipeline Systems for Hydraulic and Pneumatic Mine Backfill Conveying"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.443-446.

Hinde, A.L. and Kramers, C.P.
"The Role of Hydrocyclone Technology in Backfilling Operations"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.379-386.

Kramers, C.P., Russell, P.M. and Billingsley, I.
"Hydraulic Transportation of High Density Backfill"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.387-394.

Sellgren, A.
"A Simulation Model for Efficient Hydraulic Fill Transportation"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.395-401.

Thomas, E.G. and Holtham, P.N.
"The Basics of Preparation of Deslimed Mill Tailing Hydraulic Fill"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.425-432.

1988

Baguley, W.
"The Mixing of Backfill in Gold Mines"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.333-346.

Brabyn, S.M. and Gilchrist, I.C.R.
"Materials Selection for Backfill Transportation Pipelines"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.287-298.

Gilchrist, I.C.R.
"Predicting the Values of Flow Parameters for the Design of Pipelines Conveying Backfill Slurries"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.235-261.

Helmes, W.
"Preparation and Transportation Systems for Cemented Backfill"; Jnl. Mining Science and Technology, Vol. 7, 1988, pp.183-193.

Rainer, B.
"Backfill Cyclone Plants - A General Overview"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.429-434.

Sawyer, G.R.
"Selection Methods for Backfilling Dewatering Aids"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.307-332.

Slatter, P.T. and Lazarus, J.H.
"The Application of Viscometry to the Hydraulic Transport of Backfill Material"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.263-285.

van Niekerk, C.J. and Uys, C.J.
"Recovery of Economic Values from Backfill Prior to Placement"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.435-452.

van der Walt, P.G.
"Reticulation Systems for Deslimed Tailings"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.393-403.

1983

Neindorf, L.B.
"Fill Operating Practices at Mount Isa Mines"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.179-188.

1978

Wayment, W.R.
"Backfilling with Tailings - A New Approach"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill'; CIM Special Vol No. 19; Sudbury, Canada, May 23 - 25, 1978, pp.111-116.

1973

Nott, F.J.
"Belt Conveyors in the Mining Industry"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.177-183.

Thakur, P.C.
"The Design of a Sand Pump for Optimum Results"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.185-189.

1971

Rai, R.S.
"Stowing in Mines: Comparison and Applicability of Different Stowing Methods"; Jnl. Mines Metals and Fuels, February 1971, pp.40-44 & 47.

1970

Padmanabhan, S.
"Planning for Modern Hydraulic Stowing Systems in Mines - Part I"; Jnl. Mines Metals and Fuels, January 1970, pp.19-24.

Padmanabhan, S.
"Planning for Modern Hydraulic Stowing Systems in Mines - Part II"; Jnl. Mines Metals and Fuels, February 1970, pp.55-66.

NUMERICAL MODELLING STUDIES

1989

Cowling, R., Voboril, A., Isaacs, L.T., Meek, J.T. and Beer, G.
"Computer Models for Improved Fill Performance"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.165-174.

Gurtunca, R.G. and Clark, I.H.
"Numerical Modelling as a Basis for Evaluating the Effectiveness of Backfill as Local Support in Deep Mines"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.129-138.

Hearn, B.O. and Swan, G.
"The Use of Models in Sill Mat Design at Falconbridge"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.139-146.

Hustrulid, W., Qianyuan, Y. and Krauland, N.
"Modelling of Cut and Fill Mining Systems - Nasliden Revisited"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.147-164.

Oliver, P.H. and Landriault, D.
"The Convergence Resistance of Mine Backfills"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.433-436.

1983

Borg, T. and Krauland, N.
"The Appplication of the Finite Element Model of the Nasliden Mine to the Prediction of Future Mining Conditions"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.309-318.

Blight, G.E. and Clarke, I.E.
"Design and Properties of Stiff Fill for Lateral Support of Pillars"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.303-308.

Jian, P.
"Computer Optimisation and Evaluation of Cut and Fill Method"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.387-396.

Yamaguchi, U. and Yamatomi, J.
"A Consideration on the Effect of Backfill for the Ground Stability"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.443-451.

1980

Borg, T.
"The Nasliden Project - FEM Modelling Strategies"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.196-203.

Borg, T.
"Sensitivity Aspects of FEM Calculations"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.213-225.

Borgesson, L.
"Comparison of Hydraulic Backfill Measurements with Results from FEM Calculations"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.269-271.

Chan, S.S.M.
"Problems of Prediction of Ground Stability in Cut and Fill Operations in Deep Vein Mines with Finite Element Method"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.293-299.

Coulthard, M.A. and Dight, P.M.
"Numerical Analysis of Failed Cemented Fill at ZC/NBHC Mine, Broken Hill"; Proc. 3rd Australia - New Zealand Conf. on Geomechanics; Wellington, New Zealand, May 12 - 16, 1980, pp.2-145 to 2-151.

Groth, T.
"Description and Applicability of the BEFEM Code"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.204-208.

Groth, T. and Jonasson, P.
"Application of the BEFEM Code to the Nasliden Mine"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.226-232.

Hart, R.D.
"Geotechnical Modelling of a Cut and Fill Mining Operation"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.307-315.

Hustrulid, W. and Moreno, O.
"Support Capabilities of Fill - A Non Linear Analysis"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.107-118.

Jonasson, P.
"Shear Behaviour of Joint Elements in the BEFEM Code"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.209-212.

Knutsson, S.
"Stresses in the Hydraulic Backfill from Analytical Calculations and In-situ Measurements"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.261-268.

Krauland, N.
"FEM Model of Nasliden Mine - Requirements and Limitations at Start of Project"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.141-144.

Krauland, N., Nilsson, G. and Jonasson, P.
"Comparison of Rock Mechanics Observations with FEM Calculations"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.250-260.

Pariseau, W.G.
"Finite Element Method Applied to Cut and Fill Mining"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.284-292.

Sinclair, T.J.E., Shillabeer, J.H. and Herget, G.
"Applications of a Computer Model to the Analysis of Rock - Backfill Interaction in Pillar Recovery Operations"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.339-351.

1978

Barrett, J.R., Coulthard, M.A. and Dight, P.M.
"Determination of Fill Stability"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill'; CIM Special Vol No. 19; Sudbury, Canada, May 23 - 25, 1978, pp.85-91.

Cundall, P., Shillabeer, J.H. and Herget, G.
"Modelling to Predict Backfill Stability in Transverse Pillar Extraction"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill'; CIM Special Vol No. 19; Sudbury, Canada, May 23 - 25, 1978, pp.92-99.

1976

Pariseau, W.G., Hill, J.R.M., McDonald, M.M. and McNay, L.M.
"A Support Performance Prediction Method for Hydraulic Backfill"; USBM RI 8161, Spokane Research Centre, Spokane, Wash., U.S.A., 1976, 19 pages.

1975

Mathews, K.E. and Meek, J.L.
"Modelling of Rock Reinforcement Systems in Cut and Fill Mining"; Proc. 2nd Australian - New Zealand Conf. on Geomechanics; Brisbane, Australia, July 21 - 25, 1975, pp.42-47.

1973

Pariseau, W.G., McDonald, M.M. and Hill, J.R.M.
"Support Performance Prediction for Hydraulic Fills"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.213-219.

Pariseau, W.G.
"Influence of Hydraulic Backfill on Closure and Pillar Stress in Narrow Cut and Fill Stopes"; Proc. 15th U.S. Rock Mechanics Symposium 'Applications of Rock Mechanics'; Custer State Park, South Dakota, U.S.A., September 17 - 19, 1973, pp.23-35.

1972

Pariseau, W.G. and Kealy, C.D.
"Support Potential of Hydraulic Backfill"; Proc. 14th U.S. Rock Mechanics Symposium 'New Horizons in Rock Mechanics"; Pennsylvania State University, Pa., U.S.A., June 11 - 14, 1972, pp.501-526.

PHYSICAL MODELLING STUDIES

1991

Nnadi, G.N. and Mitchell, R.J.
"Use of Centrifuge Models to Study Simulated Blast Loadings on Backfills"; CIM Bulletin, Vol. 84, No. 951, July 1991, pp.58-63.

1989

Mitchell, R.J.
"Stability of High Narrow Backfills"; CIM Bulletin, Vol.82, No. 921, January 1989, pp.70-74.

Mitchell, R.J. and Roettger, J.J.
"Analysis and Modelling of Sill Pillars"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.53-62.

1987

Mitchell, R.J. and Smith, J.D.
"Centrifuge Model Studies for Backfill Design at Westmin Resources Ltd, H.W. Mine"; CIM Bulletin, Vol. 80, No. 903, July 1987, pp.39-44.

1986

Mitchell, R.J.
"Centifuge Model Tests on Backfill Stability"; Canadian Geotechnical Journal, Vol. 23, 1986, pp.341-345.

1983

Smith, J.D., de Jonge, C.L. and Mitchell, R.J.
"Large Scale Tests to Determine Backfill Strength Requirements for Pillar Recovery at the Black Mountain Mine"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.413-424.

1972

Mitchell, R.J., Olsen, R.S. and Smith, J.D.
"Model Studies on Cemented Tailings Used in Mine Backfill"; Canadian Geotechnical Journal, Vol. 19, 1982, pp.14-28.

ROCKBURSTS

1989

Adams, D.J., Gurtunca, R.G., Jager, A.J. and Gay, N.C.
"Assessment of a New Mine Layout Incorporating Concrete Pillars as Regional Support"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.199-208.

Barrett, A.J., Kirsten, H.A.D. and Stacey, T.R.
"Backfilling in Deep Level Tabular Stopes"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.177-186.

Dixon, J.D.
"Spiral Slot and Pillar Mining with Backfill"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.225-234.

Gurtunca, R.G., Jager, A.J., Adams, D.J. and Gonlag, M.
"The In-situ Behaviour of Backfill Materials and the Surrounding Rock Mass in South Africa Gold Mines"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.187-198.

Quesnel, W.J.F., de Ruiter, H. and Pervik, A.
"The Assessment of Cemented Rockfill for Regional and Local Support in a Rockburst Environment, LAC Minerals Ltd, Macassa Division"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.217-224.

Whyatt, J.K., Board, M.P. and Williams, T.J.
"Examination of the Support Potential of Cemented Fills for Rock Burst Control"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.209-216.

1988

Kirsten, H.A.D. and Stacey, T.R.
"Hangingwall Behaviour in Tabular Stopes Subjected to Seismic Events"; Jnl. South African Inst, Min. Metall., Vol 88, No. 5, May 1988, pp.163-172.

Spottiswoode, S.M. and Churcher, J.M.
"The Effect of Backfill on the Transmission of Seismic Energy"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.203-217.

1984

Jenkins, F.M. and Dorman, K.R.
"Undercut-and-Fill Stoping for Rockburst Control"; 'Geomechanics Applications in Underground Hardrock Mining', Edited W.G. Pariseau; Published SME and AIMMPE, New York, 1984, pp.151-162.

1980

Board, M.P. and Voegele, M.D.
"Examination and Demonstration of Undercut and Fill Stoping for Ground Control in Deep Vein Mining"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.300-306.

No Date

CANMET.
"The Use of Consolidated Fills for Controlling Violent Pillar Failure in Ontario Mines"; CANMET Contract Report; Prepared by Denison Mines Ltd, (No Date), DSS File No. 23440-6-9010.

ROCK MECHANICS AND INSTRUMENTATION TECHNIQUES

1990

CANMET.
"In-situ Determination of Dewatered Tailings Fill Properties in Ontario Mines"; CANMET Contract Report (2 Volumes); Prepared by INCO Mines Research, March 1990, DSS File No. 06SQ.23440-5-9240.

1989

Piciacchia, L., Scoble, M. and Robert, J - M.
"Field Studies by Full Displacement Pressuremeter in Mine Backfills"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.247-256.

1988

Gay, N.C., Jager, A.J. and Piper, P.S.
"Quantitative Evaluation of Fill Performance in South African Gold Mines"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.167-202.

1987

Scoble, M., Piciacchia, L. and Robert, J - M.
"In-situ Testing in Underground Backfilled Stopes"; CIM Bulletin, Vol. 80, No. 903, July 1987, pp.33-38.

1986

Robertson, A. MacG., Moss, A. and Niemi, W.R.
"A Simple Tool to Measure Stress in Mine Backfill"; Proc. 5th Conf. Ground Control in Mining, Morgantown, W.Va., June 11 - 13, 1986, pp.147-155.

1985

Bauer, E.R.
"Ground Control Instrumentation - A Manual for the Mining Industry"; USBM IC 9053, Pittsburgh Research Centre, Pittsburgh, Pa, U.S.A., 1985, 68 pages.

1984

Friel, L., Van Eeckhout, E., and Stout, K.
"Stiff Backfilled Stope - Instrumentation Plans with Initial Results"; 'Geomechanics Applications in Underground Hardrock Mining', Edited by W.G. Pariseau; Published SME and AIMMPE, New York, 1984, pp.141-150.

1980

Barton, N.
"Estimation of In-situ Joint Properties, Nasliden Mine"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.186-192.

Blackwood, R.L.
"Towards the Prediction of Pre-Mining Stresses in the European Continent"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.36-39.

Borgesson, L.
"Mechanical Properties of Hydraulic Backfill"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.193-195.

Leijon, B., Carlsson, H. and Myrvang, A.
"Stress Measurements in Nasliden Mine"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.162-168.

Ludvig, B.
"Direct Shear Tests of Filled and Unfilled Joints"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.179-185.

Nilsson, G. and Krauland, N.
"Rock Mechanics Observations and Measurements in Nasliden Mine"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.233-249.

Stephansson, O.
"The Nasliden Project - Rock Mass Investigations"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.145-161.

Swan, G.
"Stiffness and Associated Joint Properties of Rock"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.169-178.

1978

Herget, G. and de Komompay, V.
"In-situ Drainage Properties of Hydraulic Backfills"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill'; CIM Special Vol No. 19; Sudbury, Canada, May 23 - 25, 1978, pp.117-123.

1976

Thomas, E.G.
"Experiences with Underground Sampling of Emplaced Hydraulic Fill"; Proc. Australian Inst. Min. Metall, No 259, September 1976, pp.45-51.

1973

Corson, D.R. and McNay, L.M.
"Field Evaluation of Backfill Behaviour in Deep Vein Mines"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.205-212.

1972

'----'
"Rock Mechanics Instrumentation for Mine Design Proceedings: Bureau of Mines Technology Transfer Seminar, Denver, Colo., July 25, 1972"; USBM IC 8585; Compiled : Technology Transfer Group, Office of the Assistant Director - Mining, Washington, D.C.; 1972, 76 pages.

1967

Corson, D.R. and Wayment, W.R.
"Load Displacement Measurement in the Backfilled Stope of a Deep Vein Mine"; USBM RI 7038, Spokane Research Centre, Spokane, Wash., U.S.A., 1967, 51 pages.

1966

Waddell, G.G.
"In-situ Measurement of Rock Deformation in a Vein-Type Deep Mine"; USBM RI 6747, Spokane Research Centre, Spokane, Wash., U.S.A., 1966, 47 pages.

BULKHEADS AND POREWATER

1989

CANMET.
"State of the Art Review of Dewatering Schemes for Mine Backfill"; CANMET Contract Report; Prepared by Dome Mines and Falconbridge Ltd, June 1989, DSS File No. 06SQ.23440-5-9204.

Şenyur, G.
"The Time Effect on Flow Through Mine Backfill Materials"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.415-424.

1988

Blight, G.E., McPhail, G.I. and Fourie, J.
"Possible Difficulties with Building Tailings Dams of Cyclone Overflow Product";'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.453-471.

Wates, J.A.
"The Effect of Stope Backfilling on the Construction and Operation of Slimes Dams in the Gold Mining Industry"; Jnl. South African Inst. Min. Metall., Vol. 88, No. 2, February 1988, pp.41-48.

1985

Soderburg, R.L. and Busch, R.A.
"Bulkheads and Drains for High Sandfill Stopes"; USBM RI 8959, Spokane Research Centre, Spokane, Wash., U.S.A., 1985, 14 pages.

1984

Mitchell, R.J. and Roettger, J.J.
"Bulkhead Pressure Measurements in Model Fill Pours"; CIM Bulletin, Vol. 77, No. 868, August 1984, pp.50-54.

1983

Isaacs, L.T. and Carter, J.P.
"Theoretical Study of Pore Water Pressures Developed in Hydraulic Fill in Mine Stopes"; Trans. Inst. Min. Metall., Section A., Vol 92, January 1983, pp.A93-A102.

1980

Davie, M.J. and Ross, D.S.
"Design and Selection of Equipment for Deep Underground Mine Pumping Systems"; CIM Bulletin, November 1980, pp.124-132.

1975

Mitchell, R.J., Smith, J.D. and Libby, D.J.
"Bulkhead Pressures Due to Cemented Hydraulic Mine Backfills"; Can. Geotech. Jnl., Vol 12, 1975, pp.362-371.

1967

Bates, R.C. and Wayment, W.R.
"Laboratory Study of Factors Influencing Waterflow in Mine Backfill"; USBM RI 7034, Spokane Research Centre, Spokane, Wash., U.S.A., 1967, 45 pages.

POTASH AND SALT

1990

Roulston, B.V., Beddoes, R.J. and Herget, G.
"Monitoring of Consolidation of Waste Salt Backfill"; Proc. Conf. 'Stresses in Underground Structures'; Ottawa, Canada, October 2 - 3, 1990, pp.190-200.

1989

Beddoes, R.J., Roulston, B.V. and Streisel, J.
"Field Monitoring of Salt Tailings Used as Backfill in Cut and Fill Potash Mining"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.343-348.

CANMET.
"Use of Backfill in New Brunswick Potash Mines - Phase II"; CANMET Research Contract; Prepared by Mraz Project Consultants Ltd, September 1989, DSS File No. 14SQ.23440-7-9228.

Fordham, C.J., Dusseault, M.B. and Mraz, D. and Rothenburg, L.
"The Use of Relaxation Tests to Predict the Compaction Behaviour of Halite Backfill"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.327-334.

Herget, G. and Munroe, S.R.
"Utilisation of Salt Tailings Backfill at Denison-Potacan Potash Company"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.335-342.

Kaskiw, L.M., Morgan, R.M. and Ruse, D.C.
"Backfilling at I.M.C. Canada K-2 Mine"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.315-326.

1987

CANMET.
"Use of Backfill in New Brunswick Mines: Volume I - Executive Summary"; CANMET Contract Report; Prepared by Mraz Project Consultants Ltd, May 1987, DSS File No.23440-5-9031.

CANMET.
"Use of Backfill in New Brunswick Mines: Volume II - Laboratory Testing"; CANMET Contract Report; Prepared by Mraz Project Consultants Ltd, May 1987, DSS File No.23440-5-9031.

CANMET.
"Use of Backfill in New Brunswick Mines: Volume III - In-situ Testing"; CANMET Contract Report; Prepared by Mraz Project Consultants Ltd, May 1987, DSS File No.23440-5-9031.

CANMET.
"Use of Backfill in New Brunswick Mines: Volume IV - Intact Material Behaviour Model"; CANMET Contract Report; Prepared by Mraz Project Consultants Ltd, May 1987, DSS File No.23440-5-9031.

1986

CANMET.
"Use of Backfill in New Brunswick Potash Mines - Mid Project Report"; CANMET Contract Report; Prepared by Mraz Project Consultants Ltd, December 1986, DSS File No. 14SQ.23440-5-9031.

1984

CANMET.
"Determination of Engineering Properties of Waste Salt for Backfilling in Underground Potash Mines"; CANMET Contract Report; Prepared by RE/SPEC Ltd, September 1984, DSS File No. 26SQ.23440-3-9205.

1983

Djahanguiri, F. and Mahtab, M.A.
"State-of-the-Art of Pneumatic Backfilling and its Application to a Nuclear Waste Repository in Salt"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.121-128.

No Date

CANMET.
"A Field Test Program to Evaluate the Use of Salt Backfill in Saskatchewan Potash Mines"; CANMET Contract Report; Prepared Jointly by Central Canada Potash, Centre de Recherche Noranda and Potash Corporation of Saskatchewan Mining Ltd, (No Date), DSS File No. 26SQ.23440-3-9206.

VENTILATION

1989

Matthews, M.K.
"The Use of Backfill for Improved Environmental Control in South African Gold Mines"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.287-294.

1988

Matthews, M.K.
"The Implications of Backfilling on Environmental Control"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.561-582.

1984

Bayah, J., Meech, J.A. and Stewart, G.
"Oxygen Depletion of Air by Backfill Material at the Thompson Mine"; Jnl. Mining Science and Technology, Vol 1, 1984, pp.93-106.

URANIUM

1983

Clausen, G. and Archibald, J.F.
"Uranium Mill Tailings as Backfill in Underground Uranium Mines"; Jnl. Mining Science and Technology, Vol 1, 1983, pp.69-75.

TUNGSTEN

1984

Arioğlu, E.
"Design Aspects of Cemented Aggregate Fill Mixes for Tungsten Stoping Operations"; Jnl. Mining Science and Technology, Vol 1, 1984, pp.209-214.

COAL

1989

Palarski, J.
"The Experimental and Practical Results of Applying Backfill"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.33-38.

Şenyur, R.
"The Flow Characteristics Through Hydraulic Filling Materials Produced from Coal Washery Rejects"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.307-314.

Shanker, K.V. and Dhar, B.B.
"Ground Movement Prediction as an Aid to Backfill Design"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.437-442.

Thomas, E.G., Lama,R.D. and Wiryanto, K.
"Preparation of an Early Strength Material for Roof Support in Longwall Mining of Coal"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.297-306.

1985

Thomas, E.G.
"Preparation of Mine Backfill Material from Coal Washplant Material"; Jnl. Mining Science and Technology, Vol. 3, 1985, pp.1-9.

1983

Knissel, W. and Helms, W
"Strength of Cemented Rockfill from Washery Refuse - Results from Laboratory Investigations"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.31-38.

Singh, T.N, Singh, B. and Singh, R.D.
"Mixed Order Slicing of 20m Thick Moderately Dipping Coal Seam in Conjunction with Stowing"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.257-264.

Voss, K.H.
"The State of Development of Pneumatic Stowing in the Hard Coal Industry of the Federal Republic of Germany"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.281-292.

1980

Singh, T.N. and Singh, R.D.
"Feasibility of Horizontal and Inclined Slicing of Thick Coal Seams in Conjunction with Hydraulic Filling"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.72-78.

FROZEN AND ICE BACKFILL

1987

Archibald, J.F. and Nantel, J.H.
"Concept for Using Frozen Fill for Underground Support"; CIM Special Volume No. 35, 'Underground Support Systems'; Edited. J.E. Udd, pp.105-109.

1983

Fangel, H.
"Backfilling with Ice"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.455-464.

CASE HISTORIES

Australia

1989

Grice, A.G.
"Fill Research at Mount Isa Limited"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.15-22.

McKinstry, J.D. and Laukkanen, P.M.
"Fill Operating Practices at Isa Mine - 1983 to 1988"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.361-368.

1983

Barrett, J.R., Stewart, J.E. and Brock, J.G.
"Cemented Gravel Fill for a Small Underground Mine"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.67-78.

Cowling, R., Auld, G.J. and Meek, J.L.
"Experience with Cemented Fill Stability at Mount Isa Mines"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.329-340.

1980

Barrett, J.R. and Cowling, R.
"Investigations of Cemented Fill Stability in 1100 Orebody, Mount Isa Mines, Queensland, Australia"; Trans. Inst. Min. Metall., Section A, Vol 89, July 1980, pp.A118-A128.

Lee, M.F. and Bridges, M.C.
"Rock Mechanics of Crown Pillars Between Cut and Fill Stopes at Mount Isa Mine"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.316-329.

Willoughby, D.R.
"Rock Mechanics Applied to Cut and Fill Mining in Australia"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.1-10

1978

Askew, J., McCarthy, P.L. and Fitzgerald, D.C.
"Backfill Research for Pillar Extraction at ZC/NBHC"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill', Sudbury, Canada, May 23 - 25, 1978, CIM Special Volume No. 19, pp.100-110.

Leahy, F.J. and Cowling, R.
"Stope Fill Development at Mount Isa"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill', Sudbury, Canada, May 23 - 25, 1978, CIM Special Volume No. 19, pp.21-29.

1975

Worotnicki, G., Ashcroft, J.F., Alexander, L.G. and Willoughby, D.R.
"Deformation and Behaviour of High Rise Filled Stopes at C.S.A. Mine, Cobar, N.S.W."; Proc. 2nd Australia - New Zealand Conference on Geomechanics; Brisbane, Australia, July 21 - 25, 1975, pp.48-55.

1973

Dowd, P.J.
"Underground Hydraulic Filling Storage at North Broken Hill Limited"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.123-128.

Lyon, G.C., Slaughter, P.J. and Kerr, M.H.
"The Design and Operation of the Cemented Hydraulic Fill Station, Mount Isa Mines Limited"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.191-197.

Macky, I.W.
"Stope Filling at Boulder Perseverance Shaft 1895 - 1972"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.155-159.

Mathews, K.E. and Kaesehagen, F.E.
"The Development and Design of a Cemented Rock Filling System at the Mount Isa Mine, Australia"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.13-23.

Canada

1989

Udd, J.E.
"Backfill Research in Canadian Mines"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.3-14.

Yu, T.R.
"Some Factors Relating to the Stability of Consolidated Rockfill at Kidd Creek"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.279-286.

1988

Yu, T.R. and Counter, D.B.
"Use of Fly Ash in Backfill at Kidd Creek Mines"; CIM Bulletin, Vol. 81, No. 909, January 1988, pp.44-50.

Yungwirth, F.P.
"Productivity Improvement in Mechanised Cut and Fill Mining at Trout Lake Mine"; CIM Bulletin, Vol. 81, No. 909, January 1988, pp.30-33.

1987

Bharti, S., Udd, J.E. and Cornett, D.J.
"Ground Support at Strathcona Mine"; CIM Special Volume No. 35 'Underground Support Systems'; Edited. J.E. Udd, 1987, pp.13-26.

Landriault, D. and Goard, B.
"Research into High Density Backfill Placement Methods by the Ontario Division of INCO Ltd"; CIM Bulletin, Vol. 80, No. 897, January 1987, pp.46-50.

1983

McKay, D.L. and Duke, J.D.
"Mining with Backfill at Kidd Creek No 2 Mine"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.161-172.

Nantel, J.H.
"A Review of the Backfill Practices in the Mines of the Noranda Group"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.173-178.

Nantel, J.H. and Lecuyer, N.
"Assessment of Slag Backfill Properties for the Noranda Chadbourne Project"; CIM Bulletin, Vol. 76, No 849, January 1983, pp.57-60.

Yu, T.R. and Counter, D.B.
"Backfill Practice and Technology at Kidd Creek Mines"; CIM Bulletin, Vol 76, No. 856, August 1983, pp.56-65.

1980

Jeremic, M. and Cassidy, K.
"Mechanics of Ground Fracturing at Con Gold Mine, Canada"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.64-71.

Singh, K.H and Hedley, D.G.F.
"Review of Fill Mining Technology in Canada"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.11-24.

1978

Barsotti, C.
"The Evolution of Fill Mining at the Ontario Division of INCO Metals"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill', Sudbury, Canada, May 23 - 25, 1978, CIM Special Volume No. 19, pp.37-41.

Bennett, R.H.
"A Review of Current Fill Mining Practices at Eldorado Nuclear Limited, Beaverlodge Operations"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill', Sudbury, Canada, May 23 - 25, 1978, CIM Special Volume No. 19, pp.69-74.

Ford, R.A.
"A Review of Backfill Mining Practices and Technologies at the Fox Mine"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill', Sudbury, Canada, May 23 - 25, 1978, CIM Special Volume No. 19, pp.1-9.

Gignac, L.
"Filling Practices at Brunswick Mining - No 12 Mine"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill', Sudbury, Canada, May 23 - 25, 1978, CIM Special Volume No. 19, pp.30-36.

Kerr, R.W.
"The Fill System for 108 Blasthole Stope at INCO's Birchtree Mine"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill', Sudbury, Canada, May 23 - 25, 1978, CIM Special Volume No. 19, pp.16-20.

Moruzi, G.A.
"Consolidated Fill Practice at Strathcona Mine"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill', Sudbury, Canada, May 23 - 25, 1978, CIM Special Volume No. 19, pp.10-15.

Schwartz, A.
"Pillar Recoveries Using Consolidated Fill at Noranda Mines Ltd, Manitouwadge, Ontario"; Proc. 12th Can. Rock. Mechs. Symp. 'Mining With Backfill', Sudbury, Canada, May 23 - 25, 1978, CIM Special Volume No. 19, pp.56-68.

South Africa

1989

Kamp, N.
"Backfilling in Gold Mines of the Gold Fields Group"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.39-49.

Ross-Watt, D.A.J.
"Backfilling in the Base Metal Mines of the Gold Fields Group"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.351-360.

1988

Brownrigg, J.F.
"Consolidated Backfill at O'Okiep Copper Company"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.605-615.

Bruce, M.F.G. and Klokow, J.W.
"A Follow-Up Paper on the Development of a West Driefontein Tailings Backfill Project"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.473-490.

Faure, M.
"Experimental Backfilling at Harmony Gold Mine"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.405-428.

Hey, C.
"Backfill Placement Technique on Vaal Reefs"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.347-352.

Kersten, R.W.O.
"The Introduction of Backfill in the Anglovaal Group Mines, with Special Reference to Sheba Gold Mine, Barberton"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.617-626.

Kinver, P.J.
"A Review of Backfilling at Black Mountain Mine"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.583-603.

Klintworth, R.I.
"An Overview of the Backfill Mining Technique for the Multi-Reef Conditions at Cooke 3 Shaft"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.547-559.

MacFarlane, A.S.
"Integration of a Waste Fill System into a Longwall Gold Mine"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.491-523.

Pothas, W.J.C.
"Hydraulic Backfilling as Developed and Practised at East Driefontein"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.369-391.

Spearing, A.K.S. and Wilson, W.B.
"The Design of a Backfill System, with Particular Emphasis on Randfontein Estates Gold Mining Company (W) Limited"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.153-165.

Wingrove, A.C.
"Engineering Research and Development with Respect to JCI Backfill Operations"; 'Backfill in South African Mines', South African Inst. Min. Metall., Special Publication SP2; Johannesburg, 1988, pp.525-546.

1985

Kinver, P.J.
"Cut and Fill Mining of Base Metals at Black Mountain Mine"; Jnl. South African Inst. Min. Metall., Vol. 85, No. 2., February 1985, pp.51-63.

1983

Ross-Watt, D.A.J.
"Initial Experience in the Extraction of Blasthole Pillars between Backfilled Blasthole Stopes"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.199-228.

1980

de Jonge, C.L.
"Design Parameters Used and Backfill Materials Selected for a New Base - Metal Mine in the Republic of South Africa"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.100-106.

1978

Patchet, S.J.
"Fill Support System for Deep-Level Gold Mines - Prototype Installations and Economic Analysis"; Proc. 12th Can. Rock. Mech. Symp. 'Mining With Backfill'; CIM Special Vol No. 19; Sudbury, Canada, May 23 -25, 1978, pp.48-55.

Sweden

1989

Krauland, N.
"Developments in Sweden of the Rock Mechanics of Cut and Fill Mining"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.23-32.

1983

Centervarn, B.O., Kolsrud, B. and Sallert, M.
"Cut and Fill Mining at Boliden, Methods and Economy"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.107-112.

1980

'----'
"The Nasliden Mine, Sweden"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.133-136.

Kolsrud, B. "The Nasliden Project _ Why, What For and How"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.137-140.

1978

Sallert, M.
"Cut and Fill Mining with Cemented Mill Tailings at Boliden Metall AB"; Proc. 12th Can. Rock. Mech. Symp. 'Mining With Backfill'; CIM Special Vol No. 19; Sudbury, Canada, May 23 -25, 1978, pp.42-47.

1973

Hoffner, R.
"Mine Fill Research and Investigations at RIT's Division of Mining"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.115-122.

Mattson, T.
"Filling Practices in Sweden"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.199-204.

U.S.A

1989

Brechtel, C.E., Hardy, M.P., Baz-Dresch, J. and Knowlson, J.S.
"Application of High Strength Backfill at the Cannon Mine"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.105-118.

Tesarik, D.R., Seymour, J.B. and Vickery, J.D.
"Instrumentation and Modelling of the Cannon Mine's B - North Ore Body"; Proc. 4th Int. Symp. 'Mining With Backfill - Innovations in Mining Backfill Technology'; Montreal, Canada, October 2 - 5, 1989, pp.119-128.

1983

Simonson, R.A. and Logsdon, G.C.
"The Devlopment and Introduction of LED Undercut and Fill Mining at Homestakes Bulldog Mountain Mine"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.241-248.

1980

Corp, E.L.
"Rock Mechanics Research in the Coeur d'Alene Mining District"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.40-48.

Gooch, A.E.
"Cut and Fill Mining as Practised in the U.S.A. - An Overview"; Proc. Conf. 'Application of Rock Mechanics to Cut and Fill Mining'; Luleå, Sweden, June 1 - 3, 1980, pp.25-27.

1978

Hull, B.
"Magma's Sandfill System as Employed at the Magma Mine, Superior, Arizona, U.S.A."; Proc. 12th Can. Rock. Mech. Symp. 'Mining With Backfill'; CIM Special Vol No. 19; Sudbury, Canada, May 23 -25, 1978, pp.75-83.

1973

Waterland, J.K.
"Hydraulic Backfilling at Homestake"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.161-170.

1971

Corson, D.R.
"Field Evaluation of Hydraulic Backfill at the Lucky Friday Mine, Mullan, Idaho"; USBM RI 7546, Spokane Research Centre, Spokane, Wash., U.S.A., 1971, 24 pages.

Austria

1983

Eckhart, E. "Mining Methods with Hydraulic Stowing in the Austrian Lead - Zinc Mine Bleiberg"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.129-132.

China

1989

Zhou, X. and Zhang, S.
"Stability Evaluation of Alternative Designs of Drift and Fill Stoping in Zhaoyuan Gold Mine, P.R. China"; Proc. 30th U.S. Rock Mechanics Symposium, Morgantown, W.Va.

1983

Cai, S.
"A Simple and Convenient Method for Design of Strength of Cemented Hydraulic Fill"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.405-412.

Guang-Xu, T. and Mao-Yuan, H.
"Assessment on Support Ability of the Fill Mass"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.433-442.

Liangduan, W.
"The Design and Practice of Cut and Fill Method at Fankou Lead-Zinc Mine"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.293-300.

Wendian, H. and Renzhong, M.
"Usage of Downward Tailings - Fill in the Ore No 5 of Xiang-II Mine"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.141-150.

Cyprus

Terezopoulos, N.G.
"Kokkinorotsos Chrome Mine, Cyprus"; Trans. Inst. Min. Metall., Section A, Vol. 96, April 1987, pp.A41-A46.

Finland

1983

Koskela, V.A.
"Consolidated Backfilling at Outokumpu Oy's Vihanta, Keretti and Vammala Mines"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.151-160.

Nieminen, P. and Seppanen, P.
"The Use of Blast-Furnace Slag and Other By-Products as Binding Agents in Consolidated Backfilling at Outokumpu Oy's Mines"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.49-58.

1980

Lappalainen, P., Matikainen, R., Sarkka, P. and Kupias, P.
"Application of Rock Mechanics to Cut and Fill Mining at Outokumpu Oy, Finland"; Proc. Conf. "Application of Rock Mechanics to Cut and Fill Mining"; Luleå, Sweden, June 1 - 3, 1980, pp.330-338.

Saari, K. and Ylinen, A.
"Stability Calculations at Rautuvaara Mine, Finland"; Proc. Conf. "Application of Rock Mechanics to Cut and Fill Mining"; Luleå, Sweden, June 1 - 3, 1980, pp.352-361.

Germany

1983

Gerhardt, H.
"Some Aspects of Using Cemented Filling in the Ore Mining of the GDR"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.133-140.

Rohlfing, I.
"Slinger Belt Stowing Technique for Cemented Backfill at the Meggan Mine"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.189-198.

India

1983

Biswas, D.
"Back Filling Operation at I.I.C. Group of Mines"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.99-106.

Dhar, B.B, Shankar, K.V. and Sastry, V.R.
"Hydraulic Filling - An Effective Way of Ground Control"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.113-120.

Shettigar, P.A.K.
"Mining with Backfill at Indian Copper Complex"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.229-240.

Singh, R.D. and Singh, D.P.
"Evolution of Newer Techniques of Mining Thick Coal Seams and Wide Orebodies with Filling in India"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.249-256.

Srivastava, S.B. and Ghose, A.K.
"Design of Post Pillar Cut and Fill Mining System - Rock Mechanics at Surda Mine, Singhbhum"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.425-432.

Tatiya, R.R.
"Development of Stoping Methods with the Application of Backfills at Kolar Gold Field"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.273-280.

Italy

1983

Carta, M., Manca, P.P., Massacci, G., Putzolu, S. and Rossi, G.
"Investigation of an Experimental Sub-Level Stoping Method Utilising a Discrete Cemented Backfill in a Vein-Shaped Oreboby"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.319-328.

Contini, B., Iabichino, G., Mancini, R. and Pelizza, S.
"A Study on the Possible Uses of Waste Calcium Sulphate from Chemical Industry as a Mine Fill Material"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.9-20.

Manca, P.P, Massacci, G., Massidda, L. and Rossi, G.
"Mill Tailings and Various Binder Mixtures for Cemented Backfill"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.39-48.

Berlingieri, C., Congiu, M., Medda, A., Musso, L., Sancilio, C. and Trudu, I.
"Sub-Level vs Cut and Fill Stoping at the Funtana Raminosa Mine: An Economic Comparison";Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.79-98.

1980

Berry, P.
"Geomechanical Investigations for the Design of Cemented Fill"; Proc. Conf. "Application of Rock Mechanics to Cut and Fill Mining"; Luleå, Sweden, June 1 - 3, 1980, pp.79-92.

Carta, M., Cotza, R., Giuliani, S., Massacci, G. and Rossi, G.
"Rock Mechanics Topics in Cut and Fill Mining of Veins of Varying Dip"; Proc. Conf. "Application of Rock Mechanics to Cut and Fill Mining"; Luleå, Sweden, June 1 - 3, 1980, pp.49-54.

Turkey

1989

Şenyur, G.
"Short Term Stability of Cemented Aggregated Fill for Kure Copper Mine, Turkey"; Int. Jnl. Mining and Geological Engineering, Vol 7, 1989, pp.171-174.

1983

Arioğlu, E.
"Engineering Properties of Cemented Aggregate Fill for Uludağ Mine of Turkey"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.3-8.

Yugoslavia

1984

Bajzelj, U.
"Underhand Cut-and-Fill Stoping Experiments in Carboniferous Schists at the Idrija Mine"; 'Geomechanics Applications in Underground Hardrock Mining', Edited W.G. Pariseau; Published SME and AIMMPE, New York, 1984, pp.163-183.

1983

Stanković, R., Gluščević, A. and Petković, Z.
"Development of Stope Backfilling at Bor Copper Mine"; Proc. Int. Symp. 'Mining With Backfill'; Luleå, Sweden, June 7 - 9, 1983, pp.265-272.

Zaire

1973

Kvapil, R. and Blake, W.
"Geometry and Stability Determination of Large Dimension Cut and Fill Rooms at Kamoto"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.147-154.

Zambia

1973

Oliver, V.H.R. and Russell, F.M. "The Mufulira Sandplant"; Proc. Jubilee Symp. 'Mine Filling'; Mount Isa, Australia, August 19 - 22, 1973, pp.49-57.